

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Kim et al. ) Group Art Unit Unknown  
App. No. : Unknown )  
Filed : Herewith )  
For : DOUBLE-SPIRO ORGANIC )  
COMPOUNDS AND )  
ORGANIC )  
ELECTROLUMINESCENT )  
DEVICES USING THE SAME )  
Examiner : Unknown )

INFORMATION DISCLOSURE STATEMENT

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Dear Sir:

Enclosed is form PTO-1449 listing references that are also enclosed. This Information Disclosure Statement is being filed within three months of the filing date of this application or upon filing if this is a CPA or RCE, and no fee is required in accordance with 37 C.F.R. § 1.97(b)(1), (b)(2), or (b)(4).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 3/14/02

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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT          BY APPLICANT</b>  (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. MUTU12.001AUS		APPLICATION NO. Unknown	
	APPLICANT Kim et al.			
	FILING DATE Herewith		GROUP Unknown	

J1011 U.S. PTO  
 10/099781  
 03/14/02

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS
	1	5,840,217	Nov. 24, 98	Lupo et al.		
	2	5,026,894	Jan. 25, 91	Tour et al.		

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	3	Hamada et al., Organic light-emitting diodes using a gallium complex., April 20, 1998, American Institute of Physics, Volume 72, No. 16.
	4	Murata et al., Organic light-emitting devices with saturated red emission using 6, 13-diphenylpentacene., April 16, 2001, American Institute of Physics, Volume 78, No. 16.
	5	Shi et al., Doped organic electroluminescent devices with improved stability., March 31, 1997, American Institute of Physics, Volume 70, No. 13.
	6	Adachi et al., High-efficiency organic electrophosphorescent devices with tris(2-phenylpyridine) iridium doped into electron-transporting materials., August 7, 2000, American Institute of Physics, Volume 77, No. 6.
	7	Adachi et al., High-efficiency red electrophosphorescence devices., March 12, 2001, American Institute of Physics, Volume 78, No. 11.
	8	Burrows et al., Operating lifetime of phosphorescent organic light emitting devices., May 1, 2000, American Institute of Physics., Volume 76, No. 18.
	9	Baldo et al., Very high-efficiency green organic light-emitting devices based on electrophosphorescence., July 5, 1999, American Institute of Physics., Volume 75, No. 1.
	10	Baldo et al., Improved energy transfer in electrophosphorescent devices., January 18, 1999, American Institute of Physics., Volume 74, No. 3.
	11	Hamada et al., Organic light-emitting diodes using 3- or 5-hydroxyflavone-metal complexes., December 8, 1997, American Institute of Physics., Volume 71, No. 23.
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	13	Gigli et al., High-efficiency oligothiophene-based light-emitting diodes., July 26, 1999, American Institute of Physics., Volume 75, No. 4.
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	15	Yang et al., Photoluminescence and electroluminescence properties of dye-doped polymer system., 1997, Elsevier Science S.A., Synthetic Metals., 335-336.
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EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

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	APPLICANT Kim et al.	
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
20	Shoustikov et al., Orange and red organic light-emitting devices using aluminum tris(5-hydroxyquinoxaline), 1997, Elsevier Science S.A., Sythetic Metals., 217-221.
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22	Wakimoto et al., Stability characteristics of quinacridone and coumarin molecules as guest dopants in the organic LEDs., 1997, Elsevier Science S.A., Sythetic Metals., 15-19.
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26	Barbarella et al., Modified Oligothiophenes with High Photo and Electroluminescence Efficiencies., 1999, Advanced Materials, 11, No. 16.
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33	Adachi et al., Organic electroluminescence of silole-incorporated polysilane., 2000, Journal of Luminescence, Volume 87 89, 1174-1176.
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